

Federal Communications Commission

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
Cumulus Licensing LLC) File No. EB-03-DV-264
Licensee of FM Stations) NAL/Acct. No. 200532800001
KEKB(FM)) FRN 0002834810
Fruita, Colorado)
Facility ID # 30431)
KMXY(FM))
Grand Junction, Colorado)
Facility ID # 5550)
KBKL(FM))
Grand Junction, Colorado)
Facility ID # 30430)

NOTICE OF APPARENT LIABILITY FOR FORFEITURE

Released: January 6, 2005

By the District Director, Denver District Office, Western Region, Enforcement Bureau:

I. INTRODUCTION

1. In this Notice of Apparent Liability for Forfeiture ("NAL"), we find that Cumulus Licensing LLC ("Cumulus"), licensee of KEKB(FM), 99.9 MHz, Fruita, Colorado, KBKL(FM), 107.9 MHz, Grand Junction Colorado, and KMXY(FM), 104.3 MHz, Grand Junction, Colorado, apparently willfully violated Section 1.1310 of the Commission's Rules ("Rules")¹ by failing to comply with radio frequency radiation ("RFR") maximum permissible exposure limits applicable to facilities, operations, or transmitters. We conclude, pursuant to Section 503(b) of the Communications Act of 1934, as amended ("Act"),² that Cumulus is apparently liable for forfeiture in the amount of ten thousand dollars (\$10,000).

II. BACKGROUND

2. Section 1.1310 of the Rules defines the maximum permissible exposure ("MPE") limits for electric and magnetic field strength and power density for transmitters operating on towers at

147 C.F.R. § 1.1310. See also Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, Report and Order, ET Docket No. 93-62, 11 FCC Rcd 15123 (1996), recon. granted in part, First Memorandum Opinion and Order, 11 FCC Rcd 17512 (1996), recon. granted in part, Second Memorandum Opinion and Order and Notice of Proposed Rulemaking, 12 FCC Rcd 13494 (1997) ("Guidelines").

247 U.S.C. § 503(b).

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frequencies from 300 kHz to 100 GHz.³ These MPE limits include limits for “occupational/controlled” exposure and limits for “general population/uncontrolled” exposure. The occupational exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.⁴ The limits of occupational exposure also apply in situations where an individual is transient through a location where the occupational limits apply, provided that he or she is made aware of the potential for exposure. The more stringent general population or public exposure limits apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.⁵

3. On August 26, 2003, the Commission received a complaint from a tower climber concerning an RFR exposure incident that allegedly occurred on June 5, 2003, while the tower climber performed maintenance on a Cumulus owned tower, located near Grand Junction, Colorado. The tower climber alleged that while he was working on the tower, Cumulus re-energized its antenna back to full power without notification to the climber. On September 2, 2003, and July 8, 2004, the tower climber was interviewed by an agent from the Commission’s Denver Field Office.

4. Cumulus is the registered tower owner for Antenna Structure Registration Number (“ASRN”) 1022763, upon which the antennas for KBKL(FM), KMXY(FM) and KEKB(FM) are mounted.⁶ The KBKL(FM) and KMXY(FM) facilities are diplexed (combined) into one eight bay antenna mounted at a radiation center height of 73 meters above ground level (AGL) with 100 kw ERP each.⁷ Further up the tower at 98 meters (AGL) is the KEKB(FM) six bay antenna with 79 kw ERP.⁸ The tower climber was on the Cumulus tower on June 5, 2003, to attempt to repair a transmission line leak. The tower climber was wearing a suit and a hood specifically designed for protection in RFR environments. After an initial climb of approximately 200 feet up the tower, the tower climber stated that his personal RFR meter indicated that the RFR was twenty-five times the occupational MPE limit.⁹ The tower climber stated that he then descended the tower and radioed to the Cumulus engineer that the RFR level was too high for him to proceed. According to the tower climber, the Cumulus engineer agreed to

³See 47 C.F.R. § 1.1310, Table 1. The MPE limits are generally based on recommended exposure guidelines published by the National Council on Radiation Protection and Measurements (“NCRP”) in “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” NCRP Report No. 86, Sections 17.4.1, 17.4.1.1., 17.4.2, and 17.4.3 (1986). In the frequency range from 100 MHz to 1500 MHz, the MPE limits are also generally based on guidelines contained in the RF safety standard developed by the Institute of Electrical and Electronics Engineers, Inc. (“IEEE”) and adopted by the American National Standards Institute (“ANSI”) in Section 4.1 of “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” ANSI/IEEE C95.1-1992 (1992). Power density is equal to the square of the electric field strength divided by the characteristic impedance of free space (377 ohms). Similarly, power density is equal to the square of the magnetic field strength times the characteristic impedance of free space. The power density is expressed in milliwatts per square centimeter. *Guidelines, Second Memorandum Opinion and Order and Notice of Proposed Rulemaking*, 12 FCC Rcd at n.74.

⁴47 C.F.R. § 1.1310, Note 1 to Table 1.

⁵47 C.F.R. § 1.1310, Note 2 to Table 1.

⁶According to the Commission’s records, ASRN 1022763 is located at 39° 3’ 56” north latitude and 108° 44’ 54” west longitude near Fruita, Colorado, with a height above ground level of 106 meters.

⁷April 8, 2004 letter from Mark N. Lipp, Vinson & Elkins to Nikki P. Shears, Federal Communications Commission (“Supplement”) at Exhibit 1.

⁸Supplement at Exhibit 1.

⁹200 feet is equivalent to 60.96 meters.

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turn off the transmitter on the tower. The tower climber proceeded back up the tower. At that time his personal RFR monitor was indicating only a minimal RFR reading which signaled to the tower climber that the station had been taken off the air. The tower climber stated that he then turned off his personal RFR monitor because the Cumulus engineer had told him that the station would be kept off the air until he finished his work. The tower climber also removed the protective suit hood and proceeded with the maintenance work.

5. Within forty minutes of resuming his work, the tower climber stated that he felt a burning sensation on his lower legs. About three to four minutes later, the tower climber stated that he saw smoke coming from the bottom of his suit. According to information received from the manufacturer of the suit worn by the tower climber, the suit is rated for use up to fifteen to twenty times the occupational RFR MPE limit.¹⁰ The tower climber stated that he attempted to contact the Cumulus engineer but was unsuccessful. The tower climber then began to climb approximately forty feet down the tower, to what he thought was a safe place on the tower, indicating that it took him about one to two minutes to make that climb.

6. On February 4, 2004, the Denver Field Office sent a Letter of Inquiry to Cumulus asking for more information concerning the events of June 5, 2003.¹¹ Cumulus responded to the LOI on March 5, 2004,¹² and supplemented its Response on April 8, 2004.¹³ In its Response, Cumulus stated that when the tower climber arrived to fix the transmission line leak, the Cumulus engineers were told that the tower climber was in a hurry.¹⁴ One engineer initially attempted to reduce power for each of the three Cumulus stations on the tower (KEKB(FM), KBKL(FM) and KMXY(FM)) “as much as possible.”¹⁵ The engineer stated that he reduced the stations’ power to ten to twelve percent of full power and the tower climber began his climb. When the tower climber notified the engineer that his personal RFR meter was registering levels in excess of safety standards, the engineer powered down the transmitters.¹⁶

7. Once the transmitters were turned off, the tower climber began his climb again. According to the Cumulus engineer, at one point the tower climber yelled down from the tower that there was a problem with the radiation. The engineer “immediately ran back to the transmitter building and discovered that the KBKL and KMXY transmitters were on.”¹⁷ The engineer indicated that the main

¹⁰The suit was made by Euclid Garment Manufacturing Company, <http://euclidgarment.com/KWBrochure.pdf>. When the hood is removed in RFR environments where transmitters operate in frequency ranges below 500 MHz, the suit is rated for use in up to fifteen times the occupational RFR MPE limit.

¹¹February 4, 2004 Letter of Inquiry from Nikki P. Shears, District Director, Denver Field Office to Cumulus Licensing Corporation (“LOI”).

¹²March 5, 2004 letter from Mark N. Lipp, Vinson & Elkins to Nikki P. Shears, Federal Communications Commission (“Response”).

¹³April 8, 2004 letter from Mark N. Lipp, Vinson & Elkins to Nikki P. Shears, Federal Communications Commission (“Supplement”).

¹⁴Response at Exhibit 4, Exhibit 5.

¹⁵Response at Exhibit 5. According to Cumulus, KEBB(FM), KBKL(FM) and KMXY(FM) are the only stations on the KEBB tower. Response at 3.

¹⁶Response at Exhibit 5.

¹⁷Response at Exhibit 5.

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breaker for the transmitters was on and he turned it off.¹⁸ The engineer acknowledged that due to, among other things “the sense of urgency on the part of the tower crew, [he] failed to explicitly follow the procedures and [] did not notify the appropriate persons who had access to the transmitters on the KEKB tower.”¹⁹

8. Cumulus further stated in response to the LOI that the events surrounding the incident on June 5, 2003, were isolated, that Cumulus takes RFR safety seriously and that it is taking the necessary steps to prevent any similar incident from ever happening again.²⁰

III. DISCUSSION

9. Section 503(b) of the Act provides that any person who willfully or repeatedly fails to comply substantially with the terms and conditions of any license, or willfully or repeatedly fails to comply with any of the provisions of the Act or of any rule, regulation or order issued by the Commission thereunder, shall be liable for a forfeiture penalty. The term “willful” as used in Section 503(b) has been interpreted to mean simply that the acts or omissions are committed knowingly.²¹

10. Section 1.1310 of the Rules requires licensees to comply with RFR exposure limits.²² Table 1 in Section 1.1310 of the Rules provides that the occupational RFR maximum permissible exposure limit for a station operating in the frequency range of 30 MHz to 300 MHz is 1.0 mW/cm². On June 5, 2003, a tower climber engaged by Cumulus to perform maintenance work on the KEKB tower was apparently exposed to levels of RFR that far exceed the MPE limits for occupational exposure. The tower climber has stated that he was working on the KEKB tower, at a height of approximately 200 feet, which apparently placed him in close proximity to the diplexed KBKL(FM)/KMXY(FM) antenna. Cumulus engineers acknowledged that despite the decision to turn off all three of the transmitters on the tower, once the climber ascended the tower and began work, a Cumulus engineer discovered that the KBKL and KMXY transmitters were on.²³ The engineer acknowledged that due to, among other things, “the sense of urgency on the part of the tower crew, [he] failed to explicitly follow the procedures and [] did not notify the appropriate persons who had access to the transmitters on the KEKB tower.”²⁴

¹⁸Response at Exhibit 4, Exhibit 5.

¹⁹Response at Exhibit 5. The Program Director at KBKL stated that on the morning of June 5, 2003 he received calls from listeners complaining that about the low quality of the KBKL(FM) signal. The Program Director called the transmitter site and queried the system which indicated that the main transmitters were not at full power for KBKL(FM), KMXY(FM) and, he believed, KEKB(FM). He then “reset the KBKL transmitter and it began to power up, but when [he] rechecked it after a few minutes it was off.” He stated that he was unable to reset the KMXY(FM) transmitter. He attempted to contact the chief engineer who did not answer his phone. After a few more minutes, the Program Director called the transmitter site again, queried the system, found that “[a]ccording to the system, all of the stations were operating at normal power.” Response at Exhibit 6.

²⁰Response at 2 and 4; Supplement at 1. Cumulus also submitted an RFR and Environmental Assessment Study for ground level RFR exposure as Exhibit 1 to the Supplement.

²¹Section 312(f)(1) of the Act, 47 U.S.C. § 312(f)(1), which applies to violations for which forfeitures are assessed under Section 503(b) of the Act, provides that “[t]he term ‘willful’, ... means the conscious and deliberate commission or omission of such act, irrespective of any intent to violate any provision of this Act or any rule or regulation of the Commission authorized by this Act...” See *Southern California Broadcasting Co.*, 6 FCC Rcd 4387 (1991).

²²47 C.F.R. § 1.1310.

²³Response at Exhibit 5.

²⁴Response at Exhibit 5.

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According to the tower climber, he had been on the tower for approximately forty minutes when he felt a burning sensation on his lower legs. A few minutes later, the tower climber stated that he saw smoke coming from the bottom of his suit. The tower climber immediately began to climb approximately forty feet down the tower.

11. Agents from the Denver Field Office, in consultation with the Commission's Office of Engineering and Technology ("OET"), performed calculations to determine what level of RFR the tower climber may have been exposed to on June 5, 2003. The occupational RFR MPE limit for facilities, operations or transmitters, such as FM transmitters, in the 30 to 300 MHz range is 1.0 mW/cm².²⁵ Assuming, as the Cumulus engineer states, that both KBKL(FM) and KMXV(FM) came back on at the same time, the tower climber could have been exposed to levels of RFR of 184 mW/cm² which is 18,400% of the occupational RFR MPE limit.²⁶ If only one of the stations had come back on, the tower climber could have been exposed to levels of 92 mW/cm² which is 9,200% of the occupational RFR MPE limit.²⁷ Even taking into account the fifteen-fold safety factor of the tower climber's protective suit, the tower climber still could have been exposed to RFR above the occupational MPE limits. Considering Cumulus' acknowledgement that it failed to keep its transmitters from coming back on while the tower climber was on the tower, and taking into account the calculated RFR levels given off by the KBKL(FM)/KMXV(FM) diplexed antenna, it appears that Cumulus exposed the tower climber to levels of RFR greatly exceeding the occupational MPE limits.

12. Cumulus, by its employees, was responsible for and appropriately powered down the transmitters on the Cumulus tower when the tower climber stated that his personal RFR meter was reading RFR limits above the occupational MPE limit, which indicates Cumulus was aware of the potential of RFR exposure to the tower climber. Cumulus, by its employees, was also responsible for powering on one or more of the transmitters on the tower while the climber was performing maintenance on the tower. The powering on of one or more of the transmitters without warning to the tower climber while the tower climber was in the proximity of the antennas resulted in Cumulus apparently exposing the tower climber to levels of RFR exceeding the occupational/controlled MPE limit. Based on the evidence before us, we find that the Cumulus apparently willfully violated Section 1.1310 of the Rules on June 5, 2003, by exposing the tower climber to levels of RFR exceeding the occupational/controlled MPE limit permitted by the Commission.

13. *The Commission's Forfeiture Policy Statement and Amendment of Section 1.80(b) of the Rules to Incorporate the Forfeiture Guidelines ("Forfeiture Policy Statement")*²⁸ does not specify a base forfeiture for violation of the RFR maximum permissible exposure limits in Section 1.1310.²⁹ However,

²⁵Table 1 of Section 1.1310 specifies the applicable MPE limits in terms of power density (mW/cm²) for FM transmitters.

²⁶This calculated RFR level assumes operation by the diplexed stations KBKL(FM) and KMXV(FM) at 100% power. Each station is licensed to broadcast at 100 kW effective radiated power. There is no indication in the Cumulus Response or Supplement that the stations came back on the air at anything less than their full licensed power.

²⁷This calculated RFR level assumes operation by either KBKL(FM) or KMXV(FM) at 100% power only.

²⁸*Forfeiture Policy Statement and Amendment of Section 1.80(b) of the Rules to Incorporate the Forfeiture Guidelines*, 12 FCC Rcd 17087 (1997), *recon denied*, 15 FCC Rcd 303 (1999).

²⁹The fact that the *Forfeiture Policy Statement* does not specify a base amount does not indicate that no forfeiture should be imposed. The *Forfeiture Policy Statement* states that "... any omission of a specific rule violation from the ... [forfeiture guidelines] ... should not signal that the Commission considers any unlisted violation as nonexistent or unimportant. *Forfeiture Policy Statement*, 12 FCC Rcd at 17099. The Commission retains the discretion, moreover,

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we previously determined that an appropriate base forfeiture amount for violation of the RFR MPE limits is \$10,000, noting the public safety nature of the rules.³⁰ We propose the \$10,000 base forfeiture amount for Cumulus, licensee of KEKB(FM), KBKL(FM) and KMXV(FM), for producing power density levels in excess of the occupational levels stated in section 1.1310 of the Rules and for failing to take measures to adequately prevent a worker from accessing areas that exceeded the RFR exposure limits.

14. In assessing the proposed monetary forfeiture amount, we must also take into account the statutory factors set forth in Section 503(b)(2)(D) of the Act, which include the nature, circumstances, extent, and gravity of the violation, and with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and other such matters as justice may require.³¹ We believe that the seriousness of the safety violation warrants the proposed forfeiture amount of \$10,000. Accordingly, applying the *Forfeiture Policy Statement*, Section 1.80, and statutory factors to the instant case, we conclude that Cumulus is apparently liable for a \$10,000 forfeiture.

IV. ORDERING CLAUSES

15. Accordingly, IT IS ORDERED that, pursuant to Section 503(b) of the Communications Act of 1934, as amended, and Sections 0.111, 0.311, and 1.80 of the Commission's Rules, Cumulus Licensing, LLC, licensee of KEKB(FM), KBKL(FM) and KMXV(FM), is hereby NOTIFIED of this APPARENT LIABILITY FOR A FORFEITURE in the amount of ten thousand dollars (\$10,000) for violations of Section 1.1310 of the Rules.³²

16. IT IS FURTHER ORDERED that, pursuant to Section 1.80 of the Commission's Rules, within thirty days of the release date of this Notice of Apparent Liability for Forfeiture, Cumulus Licensing LLC SHALL PAY the full amount of the proposed forfeiture or SHALL FILE a written statement seeking reduction or cancellation of the proposed forfeiture.

17. Payment of the forfeiture must be made by check or similar instrument, payable to the order of the Federal Communications Commission. The payment must include the NAL/Acct. No. and FRN No. referenced above. Payment by check or money order may be mailed to Forfeiture Collection Section, Finance Branch, Federal Communications Commission, P.O. Box 73482, Chicago, Illinois 60673-7482. Payment by overnight mail may be sent to Bank One/LB 73482, 525 West Monroe, 8th Floor Mailroom, Chicago, IL 60661. Payment by wire transfer may be made to ABA Number 071000013, receiving bank Bank One, and account number 1165259.

18. The response, if any, must be mailed to Federal Communications Commission, Enforcement Bureau, Western Region, Denver Field Office, 215 S. Wadsworth Blvd., Suite 303, Lakewood, Colorado, 80226, and must include the NAL/Acct. No. referenced in the caption.

19. The Commission will not consider reducing or canceling a forfeiture in response to a claim of inability to pay unless the petitioner submits: (1) federal tax returns for the most recent three-year period; (2) financial statements prepared according to generally accepted accounting practices ("GAAP"); or (3) some other reliable and objective documentation that accurately reflects the petitioner's current financial status. Any claim of inability to pay must specifically identify the basis for the claim by

to depart from the *Forfeiture Policy Statement* and issue forfeitures on a case-by-case basis, under its general forfeiture authority contained in Section 503 of the Act. *Id.*

³⁰*A-O Broadcasting Corporation*, 17 FCC Rcd 24184 (2002).

³¹47 U.S.C. § 503(b)(2)(D).

³²47 C.F.R. §§ 0.111, 0.311 1.80 and 1.1310.

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reference to the financial documentation submitted.

20. Requests for payment of the full amount of this Notice of Apparent Liability for Forfeiture under an installment plan should be sent to: Chief, Revenue and Receivable Operations Group, 445 12th Street, S.W., Washington, D.C. 20554.³³

21. IT IS FURTHER ORDERED THAT a copy of this Notice of Apparent Liability for Forfeiture shall be sent by Certified Mail, Return Receipt Requested, and regular mail, to Cumulus Licensing LLC, 3535 Piedmont Road, Building 14, 14th Floor, Atlanta, Georgia, 30305.

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Nikki P. Shears
District Director
Denver District Office
Western Region
Enforcement Bureau

³³See 47 C.F.R. § 1.1914.